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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/602,744 | 06/25/2003 | Myoung-Kee Baek | 8733.849.00 | 1174 |

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| EXAMINER |
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FERGUSON, MARISSA L

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| ART UNIT | PAPER NUMBER |
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2854

DATE MAILED: 08/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|---------------------|--------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/602,744 | BAEK ET AL. | |
| | Examiner | Art Unit | |
| | Marissa L. Ferguson | 2854 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>6/25/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al. (US Patent 5,514,503) in view of Byun et al. (2004/0001177).

Regarding claims 1 and 3, Evans et al. teaches providing a cliché (14) having a plurality of grooves (Figure 2 and Column 5, Lines 36-60), filling Red, Green and Blue colored inks into the grooves of the cliché (Column 6, Lines 7-10), repositioning the Red, Green and Blue colored inks (Column 6, Lines 11-13), transferring the colored inks filled in the grooves of the cliché onto a printing roll (14) by rotating the printing roll (14) on the cliché in which the Red, Green and Blue colored inks are filled (Column 9, Lines 20-29) and applying the Red, Green and Blue colored inks on the printing roll onto of the substrate by rotating the printing roll across the substrate (column 10, Lines 38-45). However, he does not explicitly disclose providing a substrate, which is divided into an active area for realizing image and a dummy area for not realizing image and forming

Byun et al. teaches a system for fabricating a liquid crystal display with active pixel areas and dummy regions/regions (Figures 68,69, Paragraph 0633, Paragraph 0664 and many references mentioned throughout prior art). It would have been obvious at the time the invention was to a person having ordinary skill in the art to modify the

invention as taught by Evans to include an active area and a dummy area as taught by Byun et al., since Byun et al. teaches the active and dummy areas to provide a good, quality area without imperfections.

Regarding claim 2, Evans et al. teaches wherein filling includes placing the Red, Green and Blue colored inks into the grooves of the cliché concurrently (Column 10, Lines 51-64)

Regarding claim 4, Evans et al. teaches wherein applying includes rolling the printing roll only once across the substrate (Figure 4 and Column 10, Lines 44-48).

Regarding claim 5, Evans et al. teaches forming a black matrix on the substrate between the Red, Green and Blue colored inks on the active area (Figure 4, Lines 1-13).

Regarding claims 6,9,10,12 and 13, Evans et al. teaches the claimed invention with the exception of forming a black matrix between the Red, Green and Blue ink colored of the dummy area. Byun et al. teaches a black matrix (2110) formed between a color filter (2120) in a dummy area (Figures 53N-53P, Figure 69 and paragraph 0768). It would have been obvious at the time the invention was to a person having ordinary skill in the art to modify the invention as taught by Evans to include an active area and a dummy area as taught by Byun et al., since Byun et al. teaches the active and dummy areas to provide a good, quality area without imperfections.

Regarding claim 7, Evans et al. teaches wherein forming a black matrix includes patterning a thermoplastic resin (Column 5, Lines 36-60).

Regarding claims 8 and 11, Evans et al. teaches the claimed invention and method including wherein Red, Green and Blue color inks of the substrate are formed in at least one or more pixels when it is assumed that respective red, green and blue sub-pixels are defined as one pixel (column 7, Lines 64-67). However, he does not explicitly disclose the Red, Green and Blue color filters on the dummy area. Byun et al. teaches a color filter (2120) on a dummy area (Figures 53N-53P, Figure 69 and Paragraph 0768). It would have been obvious at the time the invention was to a person having ordinary skill in the art to modify the invention as taught by Evans to include an active area and a dummy area as taught by Byun et al., since Byun et al. teaches the active and dummy areas to provide a good, quality area without imperfections.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marissa L. Ferguson whose telephone number is (571) 272-2163. The examiner can normally be reached on (M-T) 6:30am-4:00pm and every other (F) 7:30am-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2854

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marissa L Ferguson
Examiner
Art Unit 2854

U/H



Daniel J. Colilla
Primary Examiner
Art Unit 2854